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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,138	08/04/2005	Jan Bruckner	2002P09896WOUS	4517

7590 06/27/2008

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER	
SUNG, GERALD LUTHER	
ART UNIT	PAPER NUMBER
3746	
MAIL DATE	DELIVERY MODE
06/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,138	BRUCKNER ET AL.	
	Examiner	Art Unit	
	GERALD L. SUNG	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9 and 11-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9 and 11-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 April 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

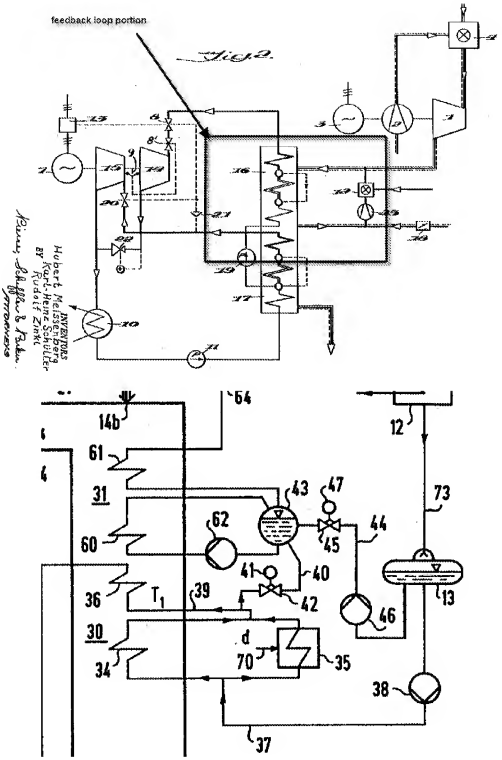
3. Claims 9, 11-12, and 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meissenberg et al. USPN 3,204,407 in view of Bruckner et al. USPN 5,365,730.

4. Regarding claim 9, referring to figure 2 below, Meissenberg et al. disclose a combined gas turbine and steam turbine power plant with a waste heat boiler 16 and 17, the elements 16 and 17 are evaporator portions of the boiler where 16 represents the high pressure evaporator and 17 represents the low pressure evaporator, a main burner 4 and an auxiliary burner 12 which supplies flue gas to the waste heat boiler, the auxiliary burner 12 is placed in a feedback loop, as indicated on figure 2 below, the feedback loop having a feedback line to feed back the flue gas, a circulation circuit that

has the burner 12 connected to it and is formed by a heating path through the waste heat boiler and the feedback line and a portion of the flue gas can be extracted at a point from the waste heat boiler and can be fed back to an inlet opening into the waste heat boiler. Meissenberg et al. do not disclose the use of a slide connected to a feed water supply line in at least one of the evaporators so that when the supply line is opened or closed steam generation in the corresponding pressure stage is controlled.

5. Referring to an enlarged portion of figure 1 below, Bruckner et al. teach the use of valves 42, 45 to adjust the amount of feed-water into drum 43. These valves, herein interpreted as equivalent to a slide, are connected to a feed water supply line 37, 44, respectively, so that when the valves are opened and closed the amount of feed-water supplied to drum 43 is regulated. This in turn corresponds to a regulation in the amount of steam generation in the corresponding pressure stage of the evaporator 60.

6. One of ordinary skill in the art at the time of the invention would have found it obvious to include a pressure regulation system such as that taught by Bruckner et al. to the steam generator in the power plant disclosed by Meissenberg et al in order to provide the proper pressure throughout the evaporator.



ENLARGED PORTION OF FIGURE 1 Bruckner et al.

7. Regarding claim 15, referring to figure 2 above, a portion of the steam flow can be extracted and used to drive either a high pressure steam turbine or a low pressure steam turbine in that the system has such an ability lacking any clear distinguishing features.

8. Regarding claims 16 and 17, Meissenberg et al. disclose a burner 12 that provides for the reheating of flue gas capable of maintaining the temperature of the steam in the boiler and/or heating the steam in the boiler.

9. Furthermore, Bruckner et al. disclose a feed-water preheater used to preheat the feed water prior to entering the evaporator.

10. One of ordinary skill in the art would have found it obvious to modify the evaporation system of Meissenberg et al. with the evaporation system taught by Bruckner et al. because the evaporation system of Bruckner et al. brings the feed-water up to a higher temperature prior to the evaporation stages thus providing a more efficient system. Less work is required to heat warmer water than colder water.

11. Regarding claims 18 and 19, referring to figure 2 below, Meissenberg et al. disclose a portion of auxiliary steam can be extracted from the evaporator and pumped via 19 in order to pump feed water into the high pressure circuit and maintain pressure in the boiler. Furthermore, fresh steam from the steam turbines can be extracted via condenser 10 and condensate pump 11 and sent back to the evaporators.

12. Regarding claims 20 and 21, referring to figure 2 below, Meisseberg et al. disclose a burner 12 capable of supplying heated flue gas to boiler thereby providing the

ability to generate steam largely independent of the operating state of the gas and/or steam turbines.

13. Regarding claims 11-12, the limitations "the flue gas can be extracted from the waste heat boiler upstream of the evaporators and in the direction of the flue gas" and "flue gas can be extracted from the waste heat boiler in the flow direction of the flue gas and downstream from its outlet openings" are encompassed by Meissenberg et al. since the reference has the ability to perform the claimed functions by tapping an upstream flue gas line or a flue gas line downstream from its outlet opening in the flue gas flow directions.

14. Furthermore, Bruckner et al. teach the use of butterfly valves 19, 20, 29 to direct the flow of flue gas. Any portion of the flue gas not used will be directed out by valve 19. The flue gas is extracted upstream of the evaporators in the direction of the flue gas. A portion of the flue gas can be extracted from the waste heat boiler in the flow direction of the flue gas, downstream of the outlet opening, indicated at 14c.

15. One of ordinary skill in the art at the time of the invention would have found it obvious to include the aforementioned features of the power plant taught by Bruckner et al. to the power plant of Meissenberg et al. in order to accommodate the production of steam. When steam generation is not required, the flue gas can be exhausted through an outlet valve upstream of the waste heat boiler.

16. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meissenberg et al. USPN 3,204,407 in view of Bruckner et al. USPN 5,365,730 and Linhardt USPN 4,831,817.

17. Regarding claims 13-14, Meissenberg et al., as previously modified by Bruckner et al., disclose all elements except for a direct temperature and/or flue gas flow rate control device.

18. Linhardt teaches the use of a system controller to vent hot gases to the atmosphere and the recuperator to control the speed of the gas turbine (column 3 lines 35-43).

19. One of ordinary skill in the art at the time of the invention would have found it obvious to include a system controller, such as the one found in Linhardt, in order to control the temperature and flue gas flow rate into the boiler so as to avoid any potential damages as well as to maximize efficiency of the power plant at all conditions of operation.

Response to Arguments

20. Applicant's arguments with respect to claims 9-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERALD L. SUNG whose telephone number is (571)270-3765. The examiner can normally be reached on M-F 9am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746

Gerald Sung
Patent Examiner
GS
19 June 2008